

Protect Yourself from Lead in your Well Water

Lead

is a naturally occurring bluish-gray metal found inside of the earth. It is also found in small amounts in all parts of our environment. Much of it comes from human activities, including burning fossil fuels, mining, and manufacturing. Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays.



How does lead get into well water?

- Lead sometimes exists naturally in soil and rocks and can get into underground water.
- Lead may get into the underground water from a polluted source such as a hazardous waste site, lead smelters or refineries, battery recycling or crushing centers, or other industrial lead sources.
- Lead usually gets into the water from the pipes and fixtures.

How do I know if my well water contains unsafe levels of lead?

Have your water tested. Contact the Environmental Health Section of your local health department for testing. The cost of the test varies from county to county. The test should contain two water samples, one from the well head, and one from the kitchen water tap. This will help determine if the source of the lead is in the well water or if it is in the pipes carrying the water into the house.

You should have your water tested for harmful chemicals every 2 to 3 years.

If you have high levels of lead in your drinking water:

- DO NOT heat or boil your water to remove lead. Because some of the water evaporates during the boiling process, the lead concentration of the water can actually increase as the water is boiled.
- Try to identify if the lead is coming from the pipes or from the underground water source. Contact the Environmental Health Section at your local health department for help. A licensed well water contractor can also help you determine the source of the lead.
- If the lead is in the underground water, you may wish to consider water treatment methods specially designed to remove lead. Contact the Environmental Health Section at your local health department for recommended procedures. You may find additional information about appropriate filters by contacting NSF International at **1-877-8NSF-HELP (1-877-857-3435)** or through their website at **www.nsf.org**.

How can lead affect my health?

- Babies may experience delayed physical and mental development.
- Children six years old and under are most at risk of the negative effects of lead because this

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How can lead affect my health (*continued*)?

is when the brain is developing. They may experience shortened attention span or hearing and learning difficulty.

- Adults may experience: muscle and joint pain, headaches, tiredness, slower reflexes, sleep problems, memory problems, stomach pain and anemia. Women can have miscarriages and men can have lower sperm production.
- Long-term exposure may result in high blood pressure, kidney damage and change in brain function. Very high levels in the body can result in confusion, seizures and coma.

When should I see a doctor?

If you think you or your family have been exposed to high levels of lead, you should see a doctor. Blood tests are available to measure the amount of lead in your blood. The Centers for Disease Control and Prevention (CDC) recommend that children get tested for lead at 1 and 2 years of age and that they get periodic tests between 3 and 6 years of age.

Whom can I call for questions?

Contact your local health department or the N.C. Division of Public Health (N.C. Department of Health and Human Services) Occupational and Environmental Epidemiology Branch at (919) 707-5900.

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N.C. Department of Health
and Human Services-
Division of Public Health

www.ncdhhs.gov
www.ncpublichealth.com

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Additional Information

- Because of health concerns, lead has been dramatically reduced in recent years in paints and ceramic products, caulking, plumbing, and pipe solder.
- A blood lead level of concern in children is 10 µg/dL, in adults is 25 µg/dL and in pregnant women is 5 µg/dL.
- The U.S Environmental Protection Agency (EPA) sets a Maximum Contaminant Level (MCL) for lead in drinking water of 0.015 mg/L.

Websites

Safe Water and Private Wells:

EPA Safe Drinking Water Hotline: 1-800-426-4791
www.epa.gov/safewater/privatewells/index2.html

NSF International:

1-877-8NSF-HELP (1-877-857-3435)
www.nsf.org

Lead:

National Lead Information Center: 1-800-424-LEAD
www.epa.gov/lead

ATSDR:

www.atsdr.cdc.gov/tfacts13.html

DHHS and Local Health Departments:

Care-Line 1-800-662-7030
(TTY for the hearing impaired: 1-877-452-2514)
www.ncdhhs.gov

This fact sheet answers the most frequently asked health questions (FAQs) about lead. This information is important because lead has the potential to cause illness. The effects of exposure to any hazardous substance depend on the dose, duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

